

## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <a href="http://about.jstor.org/participate-jstor/individuals/early-journal-content">http://about.jstor.org/participate-jstor/individuals/early-journal-content</a>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

190 REVIEWS

as well as the unknown deposits represented by the great unconformities that lie between these. The use of Proterozoic for these four systems as a group implies that taken together they are regarded as similar in importance to the Paleozoic, Mesozoic, and Cenozoic groups. To include the still greater Archean series, with its unknown extension downward, under the term Proterozoic is to introduce a usage more unfortunate than that which preceded the adoption of the term Proterozoic. The authors of this monograph have always stood for a sharp line of demarkation between the Archean and other rocks of the pre-Cambrian. It would have been easy to have said Proterozoic and Archean and thus to have given to the group included under the name Algonkian the dignity to which it is thought to be entitled by those who use the term Proterozoic for it.

In the account of the great unconformity between the Upper Huronian and underlying rocks, given on p. 619, those who have held that the term Animikie should be applied to this as a distinct system, separated from the Huronian, will find much to justify their views.

In conclusion I would state that this monograph, aside from a few points mentioned, is logically arranged and very clearly written and, considering the number, variety, and excellence of the illustrations and having regard for the amount of detailed work, the results of which are here given, it must be considered as one of the finest publications of the Geological Survey.

E. S. Moore

"Versuche über Umkristallisation von Gesteinen im festen Zustande." Von F. Leewinson Lessing. Centralblatt für Min., etc., No. 19, (October 1, 1911), pp. 607–14. Figs 7.

The experiments were planned to test the validity of the assumption that certain schists and contact metamorphic rocks have developed through the recrystallization of solid phases of previously existing rocks. A hand specimen of dunite and another of pyroxenite were subjected to a temperature of from 1,200 to 1,300° for nine months without showing signs of melting. The observed changes were textural, mineralogical, and chemical. The pyroxenite became a porous, coarse-grained aggregate of yellow, monoclinic pyroxenes spotted with ferric oxide grains. The olivine of the original rock had completely disappeared. The dunite was changed from an aggregate of angular and rounded colorless olivine grains interspersed with bunches of serpentine to a rock in which no serpentine was visible, but in its place were groupings of colorless

REVIEWS 191

grains of an undetermined mineral, probably orthorhombic pyroxene. The olivine had become closely compacted and the grains jagged in outline, with numerous inclusions of dark grains, probably iron oxide. Analyses of the fresh and altered rock showed that the recrystallization involved oxidation and dehydration.

E. STEIDTMANN

Geology of the Thousand Islands Region. By H. P. Cushing, H. L. Fairchild, R. Ruedemann, and C. H. Smyth, Jr. New York State Museum Bulletin 145. Albany, 1910. Pp. 194; Figs. 14; Pls. 63; Maps 5.

The Thousand Islands region embraces the Alexandria Bay, Cape Vincent, Clayton, Grindstone, and Theresa quadrangles of northern New York. It is a district of pre-Cambrian, Cambrian, and Lower Silurian rocks and Pleistocene deposits, which are described and faunas and structures of which are discussed.

From facts gathered outside of this district the formerly called "passage beds" lying between the Potsdam and the overlying Beekmantown have been separated into two formations, the Theresa of the Upper Cambrian and the Tribes Hill of Beekmantown age. Although the unconformity that causes the separation has not as yet been detected in this region, the paleontological evidence indicates that the separation should be made. Of special interest is the new Pamelia formation, here first differentiated, which represents an arm of the Upper Stones River sea when that sea had encroached farthest to the northeast. No deposits of the Stones River sea have previously been known to occur in New York. The Pamelia basin was entirely separated from that of the Chazy, but is considered to be contemporaneous with the interval between the Middle and Upper Chazy. The term "Black River" as applied to Lower Silurian formations, has been redefined to include, besides the "Seven foot tier" of Hall, now renamed the Watertown limestone, the Lowville formation of which the upper part (the "cherty beds") is called the Leray limestone member.

The Pleistocene deposits consist of three kinds; those formed by glaciers, those formed in the glacial Lake Iroquois, and the deposits in Gilbert Gulf, an arm of the Atlantic after Lake Iroquois had been drained to sea-level.

The pre-glacial course of Black River has a new interpretation which states it to have been the headwaters of the St. Lawrence drainage instead of the Ontario valley.